

REMARKS/ARGUMENTS

Claims 1-20 are pending in this application. These correspond to certain claims canceled in the parent application, claims 1-4, 14-17, 23-29 and 32-36 as amended in the parent application. These claims were rejected in the parent application as obvious in view of Osadchy and other references. Osadchy describes a catheter having an IR transmitter near the tip, with the variable distance to the tip being encoded as a calibration value. This calibration value is encrypted using a key to provide a digital signature.

Osadchy uses encryption because Osadchy is doing wireless transmissions from the catheter. In the Summary, on page 2, ll. 33-38, for example, it is pointed out that a wireless catheter is used, eliminating the need for digital signal wires. Thus, there is a need in Osadchy for encryption because of the wireless transmission. Wireless transmission is less secure, and also more prone to error, requiring further care in data recovery.

The present invention uses a digital signature for reasons other than protecting a wireless transmission, as noted in the application.

Traditionally, pulse oximeters have used a simple resistor, such as one of 19 resistance values, to indicate the particular wavelength of LED used in the sensor. It is only recently that a memory chip on a sensor has allowed use of much more precise codes. The present inventors uniquely recognized that such more precise codes produced a potential for error and, along with the corresponding increased danger of uncertified sensors, presented a need for the encryption and digital signature technique of the present invention. The inventors would not have been motivated to look in the wireless catheter prior art for a solution to a pulse oximeter problem.

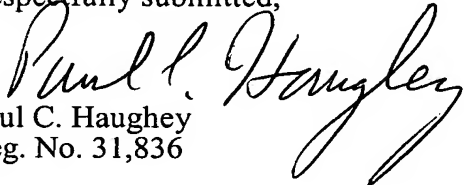
Appl. No.
Paper dated February 10, 2004
Preliminary Remarks

PATENT

CONCLUSION

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 650-326-2400.

Respectfully submitted,


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